REMARKS

This Amendment is responsive to the Final Action dated May 22, 2003. The claim amendments included herein merely serve to add previously presented dependent claim limitations into the independent claims. More specifically, the amendments serve to add the limitations of claims 15 and 34 into claims 1 and 20, respectively. Accordingly, the amendments present the rejected claims in better form for consideration on appeal, and they should be entered in due course. Moreover, the amendments are manifest, requiring only a cursory review by the Examiner, thereby providing additional ground for their entry.

Claims 1-42 were pending in the application. In the Final Action, claims 1-42 were rejected. In this Amendment, claims 15 and 34 have been cancelled, and claims 1, 4-7, 12, 13, 16, 18-20, 22-27, 30-32, 37 and 38 have been amended. Claims 1-14, 16-33 and 35-42 thus remain for consideration.

Applicant submits that claims 1-14, 16-33 and 35-42 are in condition for allowance and requests reconsideration and withdrawal of the rejections in light of the following remarks.

§103 Rejections

Claims 1-4, 8-16, 19-23, 27-30, 33-36 and 38 were rejected under 35 U.S.C. §103(a) as being unpatentable over Veltman (WO 94/30014) in further view of Yamagishi et al. (U.S. Patent No. 5,535,008).

Claims 5 and 24 were rejected under 35 U.S.C. §103(a) as being unpatentable over Veltman and Yamagishi as applied to claims 1, 2, 4, 20 and 23, and further in view of Azadegan et al. (U.S. Patent No. 5,819,004).

Claims 17, 18, 36 and 37 were rejected under 35 U.S.C. §103(a) as being unpatentable over Veltman and Yamagishi as applied to claim 1, and further in view of Iwamoto et al. (U.S. Patent No. 5,974, 225).

Claims 39-42 were rejected under 35 U.S.C. §103(a) as being unpatentable over Veltman and Yamagishi as applied to claims 1 and 20, and further in view of Azadegan.

Claims 6 and 25 were rejected under 35 U.S.C. §103(a) as being unpatentable over Veltman and Yamagishi as applied to claims 1, 20 and 23, and further in view of Dieterich (U.S. Patent No. 6,100,940).

Claims 7 and 26 and 25 were rejected under 35 U.S.C. §103(a) as being unpatentable over Veltman and Yamagishi as applied to claims 1, 2, 20, 23 and 24, and further in view of Dieterich.

Claims 15 and 34 have been cancelled, thereby rendering their rejections moot.

Applicant submits that the independent claims (claims 1 and 20) are patentable over the cited references of Veltman, Yamagishi, Azadegan, Iwamoto and Dieterich.

Applicant's invention as recited in the independent claims is directed toward a signal processor and signal processing method for compressing source data and concatenating the compressed source data with descriptive metadata. The claims specify that "the metadata [describes] the content of the source data," and that " said metadata is concatenated with compressed data corresponding to two or more non-contiguous frames of video data."

Supporting disclosure for Applicant's recited "metadata" can be found in the specification, for example, at pages 3-5.

None of the cited references discloses concatenating compressed source data with metadata describing the content of the source data wherein the metadata is concatenated with compressed data corresponding to two or more non-contiguous frames of video data. In this regard, Applicant wishes to discuss the Veltman and Yamagishi references in more detail.

The amendments made further distinguish the independent claims from the disclosure of Veltman, which relates to "auxiliary information used to decode the information stream" (see e.g. pages 41 and 43) rather than "metadata describing the content of the source data". This is in addition to the existing distinction of "whereby said metadata is concatenated with compressed data corresponding to two or more non-contiguous frames of video data".

In Veltman, auxiliary data used to decode main data is combined with the encoded main data. The auxiliary data is essential to the decoding of the main data, and must therefore be included in the combined data stream. In contrast, with the present invention, the descriptive metadata describing the content of the source data is concatenated with the compression encoded source data itself, in such a way that their combined data rate does not exceed a predetermined maximum.

The invention therefore provides a method of transporting non-essential data related to a source data stream, along with the data stream itself, in such a way that the transmission of the source data stream is not affected adversely. Veltman does not provide such a method - the auxiliary data of Veltman is essential to the encoding of the main data stream.

There is no teaching in Veltman of providing any form of descriptive metadata along with the main data stream of compression encoded source data.

Additionally, the descriptive metadata of the present invention is concatenated with compressed data corresponding to two or more non-contiguous frames of video data. The present invention recognizes that the descriptive metadata does not need to be combined with every single frame of source data, since the metadata is not required in order to decode the source data. Therefore, if the concatenation of descriptive metadata with a particular frame would cause the combined data rate to exceed the predetermined maximum, then the descriptive metadata will not be combined with that frame, and may instead be combined with a subsequent frame.

The Examiner asserts that although Veltman fails to disclose a processor and method whereby the auxiliary data is concatenated with compressed data corresponding to two or more non-contiguous frames of video data, Yamagishi teaches storing of compressed data corresponding to two or more non-contiguous frames of video data. However, this is not a valid combination of the prior art on two counts:

Firstly, in Veltman, the auxiliary data is required in order to decode the main data, and it is therefore not acceptable to de-couple a given unit of auxiliary data from its corresponding unit of main data, even if the concept of storing data corresponding to non-contiguous frames of video data were disclosed elsewhere.

Secondly, Yamagishi relates to a method of jump reproduction of a moving picture, which is a completely different application to that of the present invention and that of

Veltman. The present invention seeks to address the problem of allowing metadata to be transmitted with the video image when the bit rate of the data stream is at its maximum (see page 6, lines 14 to 20 of the present application). Starting from Veltman, the skilled person would not look to Yamagishi to solve this technical problem as it relates to the entirely different application of quick searching between I-frames using concatenated data.

Since none of the cited references discloses concatenating compressed source data with metadata describing the content of the source data wherein the metadata is concatenated with compressed data corresponding to two or more non-contiguous frames of video data, Applicant believes that claims 1 and 20 are patentable over the cited references – taken either alone or in combination – on at least this basis.

Claims 2-14, 16-19, 39 and 41 depend on claim 1. Since claim 1 is believed to be patentable over the cited references, claims 2-14, 16-19, 39 and 41 are believed to be patentable over the cited references on the basis of their dependency on claim 1.

Claims 21-33, 35-38, 40 and 42 depend on claim 20. Since claim 20 is believed to be patentable over the cited references, claims 21-33, 35-38, 40 and 42 are believed to be patentable over the cited references on the basis of their dependency on claim 20.

Applicant respectfully submits that all of the claims now pending in the application are in condition for allowance, which action is earnestly solicited.

It is submitted that these claims, as originally presented, are patentably distinct over the prior art cited by the Examiner, and that these claims were in full compliance with the requirements of 35 U.S.C. §112. Changes to these claims, as presented herein, are not made for the purpose of patentability within the meaning of 35 U.S.C. §§101, 102, 103 or 112. Rather, these changes are made simply for clarification and to round out the scope of protection to which Applicant is entitled.

Statements appearing above with respect to the disclosures in the cited references represent the present opinions of the Applicant's undersigned attorney and, in the event that the Examiner disagrees with any such opinions, it is respectfully requested that the Examiner specifically indicate those portions of the respective reference providing the basis for a contrary view.

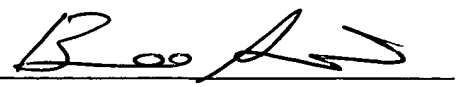
If any issues remain, or if the Examiner has any further suggestions, he/she is invited to call the undersigned at the telephone number provided below.

The Examiner is hereby authorized to charge any insufficient fees or credit any overpayment associated with the above-identified application to Deposit Account No. 50-0320.

The Examiner's consideration of this matter is gratefully acknowledged.

Respectfully submitted,

FROMMER LAWRENCE & HAUG LLP

By: 

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